

# COAST

a coastal issues newsletter from your Texas General Land Office



Sampling is done weekly at all stations during swim season—May through September—and in March at gulf beaches to coincide with spring break.

Land Office Prepared to Deal with Hurricanes page 2

Mobi-Chairs Rule the Beach page 2

Texas Coastal Expo Draws a Crowd in Corpus Christi

page 3

Derelict Vessel Removal Making Texas Coast Safer page 3

Marsh Restoration Project to Reverse Decades of Erosion

page 4

## 

In July, Texas Land Commissioner Jerry Patterson unveiled a new and expanded Texas Beach Watch website that allows users to see real-time data on beach conditions in Nueces County.

"This pilot project puts more eyes than ever on Coastal Bend beaches," Patterson said. "At TexasBeachWatch.com you're just a mouse click away from knowing if the surf's up or not."

To find a map of the five beaches participating in the pilot program, just click

on the Beach Conditions tab at the top of the Texas Beach Watch page. Next, click on the icon of a particular beach to get the most up-to-date report on conditions there.

The site monitors overall beach conditions, water color, wind direction and the type and height of the surf. It also notes any algal blooms, which can cause respiratory issues for some, and reports on any beach flags to alert swimmers of any risks.

The information is provided from volunteers who are actually employees at Mustang Island State Park, the City of Corpus Christi and Nueces County Parks. These observers collect data daily and send it to the website via Blackberry smartphones provided to them for real-time reporting.

"If this works out, we hope to expand this effort all along the Texas coast," Patterson said.

TexasBeachWatch.com is user-friendly, allowing beachgoers to simply click on a map of the Texas coast for a pop-up window showing water quality data or the latest beach conditions. The site takes the mystery out of what's in the water and helps coastal communities identify areas needing focused improvement.

The public can also sign up to receive weekly e-mail reports about water quality or daily e-mail reports about beach conditions. Just click on the "Stay Informed" link on the website and sign up.

Texas Beach Watch monitors water quality at all of Texas' top recreational beaches by testing for the presence of the Enterococcus bacteria, which is found in the intestinal tracts of animals and humans and indicates fecal contamination, usually by storm water runoff.

When bacteria levels in the water exceed the acceptable standards established by the Environmental Protec-



Collecting water samples.

tion Agency, the Land Office works with local officials to issue advisories warning the public not to swim in the affected waters.

Under the Texas Beach Watch program, the Land Office manages a network of universities, local governments and commercial laboratories to collect water samples and test for harmful bacteria.

"Short of taking along a microbiologist, TexasBeach-Watch.com is the best way to know that the water's fine," Patterson said.



Testing water samples.

## **Land Office Prepared to Deal with Hurricanes** -

In 2009, following Hurricane Ike, the Texas General Land Office organized a Storm Team, using the Incident Command System developed for oil spills to respond to major hurricane events. That same year, the Storm Team developed the Land Office Storm Response Plan to guide the Land Office response to tropical storms and hurricanes threatening the state's coast. It provides guidance on how the Land Office will implement its new authority to clean storm debris from the beaches and state submerged lands. It also promotes coordination within the Land Office and among public and private responders at the federal, state and local levels.

With Hurricane Ike still on everyone's mind, the 2010 Hurricane Season started off early in June, with Hurricane Alex signaling the beginning

### **Coastal Coordination Council**

#### Chairman

Jerry Patterson

Commissioner of the Texas General Land Office

#### Members

**Elizabeth Ames Jones** 

Railroad Commission of Texas

#### **George Deshotels**

Coastal Government Representative

#### **Bob McCan**

Agriculture Representative

#### Jose Dodier

Texas State Soil and Water Conservation Board

Coastal Business Representative

#### **Edward Vaughan**

Texas Water Development Board

#### **Ned S. Holmes**

Texas Transportation Commission

#### Robert "Bob" Jones

Coastal Resident Representative

#### **Buddy Garcia**

Texas Commission on **Environmental Quality** 

#### Robert R. Stickney

Texas Sea Grant College Program

#### Karen J. Hixon

Parks and Wildlife Commission of Texas

On the Coast is produced by the Coastal Resources Program of the Texas General Land Office in cooperation with the Office of Communications. For more information on the Coastal Resources Program or to subscribe to this newsletter, please call Martha Zottarelli at 512-463-6119 or e-mail her at martha.zottarelli@glo.texas. gov or visit the GLO Website at www.glo. texas.gov

of what forecasters were calling an above normal season. Only three weeks into the 2010 season, Alex began as a tropical disturbance in the Caribbean on June 24, quickly forming into a tropical storm as it approached the Yucatan Peninsula. Although crossing the Yucatan weakened Alex back to a tropical depression, it quickly reformed back into a tropical storm on June 28 as it came off the Yucatan coast and into the Bay of Campeche. The

next day, Alex had become the first

hurricane of the season, and took

aim at the lower Texas coast.

The Land Office quickly put the Storm Team and response plan into action, and agency staff members helped man the State Operations Center at DPS headquarters in Austin. Alex was expected to make landfall near Brownsville as a Category 2 hurricane, the same intensity as Hurricane Ike at landfall. Luckily, Texas was spared in the last 24 hours, as Alex turned west to make landfall in northern Mexico, 105 miles south of the Rio Grande.

Following Alex's near miss, the month of July and part of August were mostly quiet, with a couple of short-lived tropical storms near Florida and in the Atlantic. But just when it seemed forecasters had missed on their projections, storms started forming off the coast of Africa in late August. Commonly referred to as Cape Verde storms, because they form in the warm waters near the Cape Verde Islands, these storms can become powerful hurricanes. Within two weeks, hurricanes Danielle, Earl, Fiona and Gaston had formed, but they remained in the Atlantic. Although the season seemed to be picking up, it still appeared uneventful for Texas, until the morning of September 6, when Texans were blindsided by Tropical Storm Hermine, predicted to make landfall near Brownsville only 24 hours after forming.

With Hermine bearing down on the Texas coast, the Land Office hurried to put the Storm Team and plan into action once again. As it turned out, Hermine inflicted little damage to the state, although three Mexican shrimp boats washed up on South Padre Island beaches. Once the storm had moved inland, the Storm Team contacted coastal communities for damage assessments.

Hermine showed how quickly Texas can be threatened by coastal storms and underscores the importance of being prepared.

## Mobi-Chairs Rule the Beach

The Texas Open Beaches Act states "The public ... shall have the free and unrestricted right of ingress and egress to and from the state-owned beaches." In other words, everyone has the right to enjoy the state's beaches. To this end, Texas Land Commissioner Jerry Patterson has provided a Mobi-Chair to Port Aransas, allowing folks with disabilities to more fully enjoy the beach and surf experience.

Mobi-Chairs are amphibious wheelchairs that can roll across the sand and float in the surf. "These chairs really open up the beach for anyone with special needs," Patterson said.

The Mobi-Chair's three wide, rubber pneumatic tires spread the weight of the chair and occupant over a wider area, enabling it to traverse soft sand. The wheels and the chair's armrests also provide excellent flotation, allowing users to move over the beach, into the water and return to terra firma without pause.

This summer, Christopher Dunton, who has autism, epilepsy and is mentally challenged, got a chance to use a Mobi-Chair. Christopher went with his family to Port Aransas, as they've done every summer for the past 16 years. Monica Jones, Christopher's mom, was visiting with David Parsons, Deputy City Manager of Port Aransas, when he mentioned the Mobi-Chair. "We just got the chair from Commissioner Patterson, so it had never been used," Parsons recalled. "We do everything we can to make sure each visitor to our beaches has the best experience possible. The Mobi-Chair gives us an

opportunity tο enhance beach experience for folks with disabilities."

Thanks to the Mobi-Chair, Christopher was able to experience the beach as he had never done before. "Christopher's expethis rience past summer in Port Aransas was



The amphibious Mobi-Chair allows disabled Texans to go from sand to surf.

amazing," his mother said. "Watching him smile in the ocean was priceless. Not only was it wonderful for me as his mother, it was very moving for the folks that saw us and visited with us on the beach that day. We are looking forward to next year even more than we usu-

For more information on public beach access in Texas, please visit www.TexasBeachAccess.org.



## Texas Coastal Expo Draws a Crowd in Corpus Christi

Hundreds of people turned out for the Texas General Land Office Coastal Expo at Corpus Christi's Texas State Aquarium on July 24. The free and family-friendly event was designed to promote one of our state's most precious resources: Texas beaches and coastal areas.

Texas Land Commissioner Jerry Patterson said bringing children to the Coastal Expo "might just make a difference that will last a lifetime."

Expo attendees, especially the children, had plenty of opportunities to learn about the Texas coast while having a great time. Visitors had a chance to meet sea creatures up close and personal at one of three Creature Features at the expo, starring a variety of wildlife from the Texas State Aquarium.

Other activities included a surfing simulator, demonstrations of the effects of coastal erosion and the importance of a healthy dune system, touch tanks full of friendly sea creatures and fish printing.

Hugely popular were free, one-hour cruises in Corpus Christi Bay aboard the R/V Karma, a former shrimp boat turned floating classroom by the Texas Sea Grant College Program.

Patterson—the top elected steward of the Texas coast—said the long-term goal of the Texas Coastal Expo is nothing less than improving how Texans care for their coast.

"Simply put: The more Texans know about our coast, the more they'll work to protect it," he said.

The Texas Shrimp Association's Director, Les Hodgson, made a presentation about Texas shrimpers helping the Kemp's ridley sea turtle come back from near extinction. In addition, Dr. Gary Jeffress, director of the Conrad Blucher Institute for Surveying and Science at Texas A&M University-Cor-

pus Christi, gave a presentation about the Texas Coastal Ocean Observation Network.

In addition to learning about the coastal environment, Expo attendees learned about future renewable energy production on the Texas coast, such as wind, geo-



A beautiful sand sculpture takes shape at the Coastal Expo.

thermal and solar power, and AEP Texas explained how Texas Smart Meters will help conserve that power.

Thanks to the many sponsors including: AEP Texas, the Coastal Bend Bays and Estuaries Program, Nu Star Energy, The University of Texas Marine Science Institute - National Estuarine Research Reserve Program, Sea Grant, the Texas Shrimp Association, the American Shore and Beach Preservation Association, America's Wetland Foundation, the Brazoria County Shoreline Restoration Task Force, Blackbeard's Restaurant, the City of Corpus Christi Parks and Recreation Department, Coast and Harbor Engineering, H-E-B, HNTB, Taylor Engineering, Inc., Texas Parks and Wildlife Department, K99-FM, KSAB 99.9 Tejano, and 1360 AM Newstalk KKTX.

## **Derelict Vessel Removal Making Texas Coast Safer** -



A derelict commercial fishing vessel awaits scrapping.

Along the Texas coast, from Sabine Pass to Boca Chica, derelict and abandoned vessels and structures pose a serious threat to both navigation and the environment. Since 2005, state law prohibits abandoning or maintaining any structure or vessel in coastal wa-

ters or on state-owned submerged land in a wrecked, derelict or substantially dismantled condition. In addition, Texas Land Commissioner Jerry Patterson was granted authority by the Legislature to remove and dispose of such vessels and structures.

To date, the Oil Spill Prevention and Response Division (OSPR) of the Texas General Land Office has documented more than 650 derelict vessels and structures. The Land Office has prioritized 102 documented vessels and seven structures or groups of structures for removal, such as abandoned docks and piers, pilings, bulkheads and marinas. Old commercial fishing vessels, barges and other heavy commercial vessels have littered coastal waterways for years, sometimes decades, chiefly because cash-strapped local governments don't have the hundreds of thousands of dollars required to remove them. Many are legacy wrecks that have been in place for more than 25 years. For coastal local governments, it's an intractable problem with no easy solution. Fortunately, the Land Office, through a Coastal Impact Assistance Program grant, will remove and properly dispose of selected derelict and abandoned vessels and structures.

Efforts will be made to coordinate their removal to achieve economies of scale. The Land Office will solicit bids from contractors to remove the sunken vessels in OSPR's Region 1, which includes Jefferson, Orange and Chambers counties—the area with the highest number of derelict vessels. Removal activity will then focus on the mid-coast (Region 3) and will include removal projects in Aransas, Refugio, San Patricio, Nueces, Kleberg and Kenedy counties. If funding is still available, removal efforts will then center on Region 2, primarily Galveston, Harris, Brazoria and Matagorda counties.

Derelict and abandoned vessels and structures restrict and alter coastal processes, release hazardous materials and oil into the environment and degrade coastal habitat. Oil leaking from bilges and crankcases, diesel fuel, batteries and industrial and marine coatings are commonly found in abandoned vessels. In addition, various preservatives are used in wooden piers and pilings, and most are specifically designed to be toxic to benthic organisms.

Creation of the Derelict Vessel and Structure Removal program permitted the expeditious removal (with FEMA funding) of 131 vessels that were casualties of Hurricane Ike, which struck the Texas coast in 2008. The program creates partnerships with other state agencies—the Texas Parks and Wildlife Department, Texas Historical Commission and Texas Commission on Environmental Quality—as well as federal regulatory agencies including the U.S. Army Corps of Engineers, U.S. Coast Guard and the Environmental Protection Agency. Partnerships also exist with local governments in coastal areas, navigation districts and non-governmental organizations like the Galveston Bay Foundation and Coastal Bend Bays Foundation.

Removing derelict structures and vessels will help coastal habitat and natural processes to recover. Eliminating these chronic pollution sources will improve the water quality of the state's marine environment, benefiting Texans who visit the beach and marine species that end up on our tables.

## Marsh Restoration Project to Reverse Decades of Erosion



**Coastal America Partnership Award recipients.** 

The Coastal Management Program, managed by the Texas General Land Office, will fund a marsh restoration project at the Portland Causeway in Corpus Christi. The Coastal Bend Bays & Estuaries Program (CBBEP) will carry out the project and has already

acquired the remaining 33 acres of undeveloped property along the north side of the causeway.

The project will raise bottom elevation to support low-marsh communities, design channels for adequate circulation through the raised areas, and plant appropriate vegetation. Both the marsh complex and causeway will be protected by an earthen or stone berm.

The causeway has provided public access for bird watchers, wadefishers and light watercraft since it was built in the late 1940s. About 180 acres of marsh habitat were lost to dredging and construction during the causeway's construction, and another 160 acres of marsh have been lost to erosion since then.

Currently, public access along the Nueces Bay side of the Portland Causeway is largely unmanaged, increasing the vulnerability of crucial habitat and adding to the effects of natural erosion.

CBBEP has spent nearly \$130,000 to assess the area, conduct an analysis of marsh restoration alternatives, select a preferred restoration alternative, develop conceptual plans for the preferred alternative, and submit a U.S. Army Corps of Engineers permit application. CBBEP has allocated \$70,000 for improvements to managed public access at the

site, including controlled parking and boat and kayak launch facilities. These improvements will be implemented during or after marsh restoration as appropriate, to ensure they don't interfere with construction access during restoration.

Based on a habitat assessment conducted in 2006, the general health of the remaining marsh complex is good, supporting a variety of fisheries, including critical nursery habitat, and providing foraging and loafing opportunities for migratory colonial waterbirds. These undoubtedly contribute to the success of nearby rookery islands that exhibit increased nesting populations of crucial species. Among these are black skimmers, brown pelicans, great blue herons, great egrets, snowy egrets, tri-colored herons and a variety of tern.

Low-marsh communities, dominated by smooth cordgrasss (Spartina alternifiora), are much more ecologically productive than mid-marsh communities and adjacent uplands. Unfortunately, it's the low-marsh communities that have suffered the greatest loss, to the point where they're no longer the dominant community type in the area. The Portland Causeway marsh restoration project will help to address this problem, creating habitat and recreational opportunities for local denizens, be they bird or human.



Volunteers prepare to plant marsh vegetation as part of the Burnet Bay restoration project.



Printed on recycled paper using soy-based inks. The Texas General Land Office does not discriminate on the basis of race, color, national origin, sex, sexual orientation, age or disability in employment or the provision of services. To request special accommodations, call the Director of Human Resources/ADA Coordinator at 512-475-1390. To contact us by TDD, call 512-463-5330 or through RELAY Texas at 1-800-735-2988, or mail your request to:

The Texas General Land Office, P.O. Box 12873, Austin, Texas 78711-2873.



A publication of the Texas General Land Office pursuant to National Oceanic and Atmospheric Administration Award No. NA10N0S4190207.





